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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF	:
Sandrine DECOSTER, et al.	: GROUP ART UNIT: 1616
SERIAL NO: 10/606,786	:
FILED: JUNE 27, 2003	: EXAMINER: ARNOLD, ERNST V.
FOR: COMPOSITION COMPRISING A QUARTERNARY SILICONE AND A LIQUID FATTY ALCOHOL AND METHOD OF TREATMENT	

DECLARATION UNDER 37 C.F.R. 1.132

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

SIR:

I, FREDERIC WOODLAND, hereby declare:

1. I am employed by L'ORÉAL as an engineer and have experience in the field of cosmetics preparing and analyzing compositions.
2. The following observations and experiments were carried out by me or under my direct supervision and control.
3. The following compositions were prepared (quantities in g of active substances):

Ingredient	Invention Example A	Comparative Example 1
Abil Quat 3272 (Evonik Goldschmidt)(Quaternium – 80)	0.5	0.5
Oleyl Alcohol	0.5	----

Stearyl alcohol	----	0.5
Water	Qs 100	Qs 100

Ingredient	Invention Example B	Comparative Example 2
Abil Quat 3474 (Evonik Goldschmidt)(Quaternium – 80)	0.1	0.1
Laureth-4	5	----
Stearyl alcohol	----	5
Water	Qs 100	Qs 100

These compositions differed in that Invention Examples A and B contained liquid fatty alcohol in different concentrations (Example A – oleyl alcohol; Example B – laureth-4), whereas comparative compositions 1 and 2 contained stearyl alcohol, a solid alcohol.

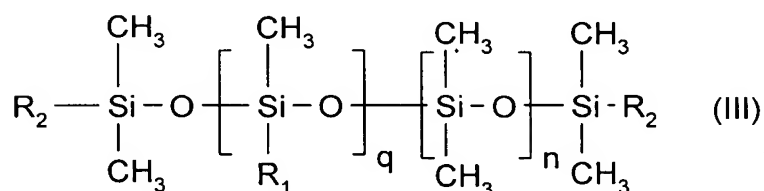
4. The turbidity of these three compositions was determined using a 2100P Turbidimeter from from Hach Company. Invention Compositions A and B were transparent, having a turbidity of 30 NTU and 280 NTU, respectively. In contrast, both of the Comparative Compositions were not transparent, Comparative Composition 1 having a turbidity of 390 NTU and Comparative Composition 2 having a turbidity greater than 1000 NTU.

5. Also, Invention Compositions A and B were stable. In stark contrast, Comparative Compositions 1 and 2 were unstable, suffering from flocculation.

6. The vast difference in turbidity and stability properties between the Invention Compositions and the Comparative Compositions was surprising and unexpected given the

similarity of the compositions, and demonstrates the benefits of combining the required liquid alcohol and the required silicone with quaternary ammonium groups in a single composition.

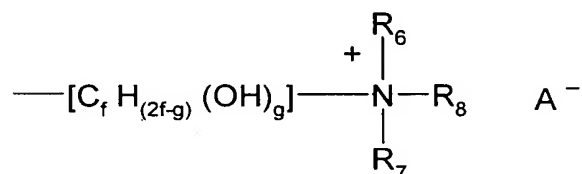
7. The improved cosmetic properties obtained with the Invention Compositions are representative of the present invention. That is, I would expect, based on the above experiments specifically and my experience in the laboratory generally, compositions containing a cosmetically acceptable medium, at least one silicone with quaternary ammonium groups represented by formula (III):



in which:

- R_1 , which is identical or different, represents a linear or branched C_1 - C_{30} alkyl group or phenyl group;
- R_2 , which is identical or different, represents $-C_eH_{2e}-O-(C_2H_4O)_a-(C_3H_6O)_b-R_5$ or $-C_eH_{2e}-O-(C_4H_8O)_a-R_5$;

R_5 , which is identical or different, is selected from the group consisting of the groups of the following formula:



- the radicals R_8 independently represent a linear or branched C_1 - 22 alkyl or C_2 - 22 alkenyl radical, and optionally carrying one or more OH groups or represent a group $C_hH_{2h}ZCOR_9$;
- R_6 , R_7 and R_9 , which are identical or different, represent linear or branched C_1 - 22 alkyl or C_2 - 22 alkenyl radicals optionally carrying one or more OH groups, or R_7 may form with part of R_8 a heterocycle ,
- n varies from 0 to 500;
- q varies from 0 to 20;
- a varies from 0 to 50;

- b varies from 0 to 50;
- c varies from 0 to 4;
- f varies from 0 to 4,
- g varies from 0 to 2,
- h varies from 1 to 4,

Z represents an oxygen atom or NH, and

A⁻ represents a monovalent inorganic or organic anion, wherein the silicone with quaternary ammonium groups is present in an amount of 0.01 to 10% by weight relative to the total weight of the composition, and

at least one fatty alcohol which is liquid at 25°C and at 1 atm selected from the group consisting of saturated or unsaturated, linear or branched C₈-C₃₀ fatty alcohols optionally oxyalkylenated with 1 to 15 mol of alkylene oxide or polyglycerolated with 1 to 6 mol of glycerol, wherein the liquid fatty alcohol is present in an amount ranging from 0.01% to 15% by weight relative to the total weight of the composition, to possess improved cosmetic properties like those of the exemplified Invention Compositions. I have no reason to expect otherwise.

8. The improved cosmetic properties associated with the invention compositions are commercially significant. Clearly, compositions having superior stability are more commercially viable than other compositions. Also, because clear compositions are often perceived by consumers to be cleaner or more hygienic than opaque compositions, transparent compositions are more commercially viable than opaque compositions.

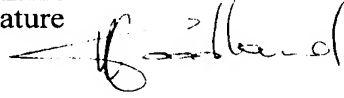
9. The undersigned petitioner declares further that all statements made herein of her own knowledge are true and that all statements made on information and belief are believe to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

10. Further deponent sayeth not.

Name

FREDERIC WOODLAND

Signature

A handwritten signature in cursive script, appearing to read "F. Woodland", written over a horizontal line.

Date

September 15th, 2009